

REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION
9 VAC 5 CHAPTER 10.

GENERAL DEFINITIONS.

9 VAC 5-10-10. General.

A. For the purpose of ~~this chapter the Regulations for the Control and Abatement of Air Pollution~~ and subsequent amendments or any orders issued by the board, the words or terms shall have the meanings given them in 9 VAC 5-10-20.

B. Unless specifically defined in the Virginia Air Pollution Control Law or in ~~this chapter the Regulations for the Control and Abatement of Air Pollution~~, terms used shall have the meanings given them by 9 VAC 5-170-20 (definitions, Regulation for General Administration), or commonly ascribed to them by recognized authorities, in that order of priority.

C. In addition to the definitions given in this chapter, some other major divisions (i.e. chapters, parts, articles, etc.) of the Regulations for the Control and Abatement of Air Pollution have within them definitions for use with that specific major division.

9 VAC 5-10-20. Terms defined.

"Actual emissions rate" means the actual rate of emissions of a pollutant from an emissions unit. In general actual emissions shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during the most recent two-year period or some other two-year period which is representative of normal source operation. If the board determines that no two-year period is representative of normal source operation, the board shall allow the use of an alternative period of time upon a determination by the board that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

"Administrator" means the administrator of the U.S. Environmental Protection Agency

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(EPA) or an authorized representative.

"Affected facility" means, with reference to a stationary source, any part, equipment, facility, installation, apparatus, process or operation to which an emission standard is applicable or any other facility so designated. ~~The term affected facility includes any affected source [as defined in 40 CFR 63.2].~~

~~["Affirmative defense" means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.]~~

"Air pollution" means the presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety; to animal or plant life; or to property; or which unreasonably interfere with the enjoyment by the people of life or property.

"Air quality" means the specific measurement in the ambient air of a particular air pollutant at any given time.

"Air quality control region" means any area designated as such in 9 VAC 5-20-200.

~~"Air quality maintenance area" means any area which, due to current air quality or projected growth rate or both, may have the potential for exceeding any ambient air quality standard set forth in 9 VAC 5 Chapter 30 (9 VAC 5-30-10 et seq.) within a subsequent 10-year period and designated as such in 9 VAC 5-20-203.~~

"Alternative method" means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method, but which has been demonstrated to the satisfaction of the board, in specific cases, to produce results adequate for its determination of compliance.

"Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.

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"Ambient air quality standard" means any primary or secondary standard designated as such in 9 VAC 5 Chapter 30 (9 VAC 5-30-10 et seq.).

"Board" means the State Air Pollution Control Board or its designated representative.

"Class I area" means any prevention of significant deterioration area (i) in which virtually any deterioration of existing air quality is considered significant and (ii) designated as such in 9 VAC 5-20-205.

"Class II area" means any prevention of significant deterioration area (i) in which any deterioration of existing air quality beyond that normally accompanying well-controlled growth is considered significant and (ii) designated as such in 9 VAC 5-20-205.

"Class III area" means any prevention of significant deterioration area (i) in which deterioration of existing air quality to the levels of the ambient air quality standards is permitted and (ii) designated as such in 9 VAC 5-20-205.

"Continuous monitoring system" means the total equipment used to sample and condition (if applicable), to analyze, and to provide a permanent continuous record of emissions or process parameters.

"Control program" means a plan formulated by the owner of a stationary source to establish pollution abatement goals, including a compliance schedule to achieve such goals. The plan may be submitted voluntarily, or upon request or by order of the board, to ensure compliance by the owner with standards, policies and regulations adopted by the board. The plan shall include system and equipment information and operating performance projections as required by the board for evaluating the probability of achievement. A control program shall contain the following increments of progress:

1. The date by which contracts for emission control system or process modifications are to be awarded, or the date by which orders are to be issued for the purchase of

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component parts to accomplish emission control or process modification.

2. The date by which the on-site construction or installation of emission control equipment or process change is to be initiated.

3. The date by which the on-site construction or installation of emission control equipment or process modification is to be completed.

4. The date by which final compliance is to be achieved.

"Criteria pollutant" means any pollutant for which an ambient air quality standard is established under 9 VAC 5 Chapter 30 (9 VAC 5-30-10 et seq.).

"Day" means a 24-hour period beginning at midnight.

"Delayed compliance order" means any order of the board issued after an appropriate hearing to an owner which postpones the date by which a stationary source is required to comply with any requirement contained in the applicable [State Implementation Plan implementation plan].

"Department" means any employee or other representative of the Virginia Department of Environmental Quality, as designated by the director.

"Director" or "executive director" means the director of the Virginia Department of Environmental Quality or a designated representative.

"Dispersion technique"

1. Means any technique which attempts to affect the concentration of a pollutant in the ambient air by:

a. Using that portion of a stack which exceeds good engineering practice stack height;

b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

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c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise.

2. The preceding sentence does not include:

a. The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;

b. The merging of exhaust gas streams where:

(1) The owner demonstrates that the facility was originally designed and constructed with such merged gas streams;

(2) After July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of "dispersion techniques" shall apply only to the emission limitation for the pollutant affected by such change in operation; or

(3) Before July 8, 1985, such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the board shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the owner that merging was not significantly motivated by such intent, the board shall deny credit for the

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effects of such merging in calculating the allowable emissions for the source;

- c. Smoke management in agricultural or silvicultural prescribed burning programs;
- d. Episodic restrictions on residential woodburning and open burning; or
- e. Techniques under subdivision 1 c of this definition which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.

"Emergency" means a situation that immediately and unreasonably affects, or has the potential to immediately and unreasonably affect, public health, safety or welfare; the health of animal or plant life; or property, whether used for recreational, commercial, industrial, agricultural or other reasonable use.

"Emission limitation" means any requirement established by the board which limits the quantity, rate, or concentration of continuous emissions of air pollutants, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures to assure continuous emission reduction.

"Emission standard" means any provision of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.), or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.) which prescribes an emission limitation, or other requirements that control air pollution emissions.

"Emissions unit" means any part of a stationary source which emits or would have the potential to emit any air pollutant.

"Equivalent method" means any method of sampling and analyzing for an air pollutant which has been demonstrated to the satisfaction of the board to have a consistent and quantitative relationship to the reference method under specified conditions.

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~~["EPA" means the U.S. Environmental Protection Agency or an authorized representative.]~~

"Excess emissions" means emissions of air pollutant in excess of an emission standard.

"Excessive concentration" is defined for the purpose of determining good engineering practice (GEP) stack height under subdivision 3 of the GEP definition and means:

1. For sources seeking credit for stack height exceeding that established under subdivision 2 of the GEP definition, a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard. For sources subject to the provisions of 9 VAC 5-80-20, an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this provision shall be prescribed by the new source performance standard that is applicable to the source category unless the owner demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the board, an alternative emission rate shall be established in consultation with the owner;

2. For sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under subdivision 2 of the GEP definition, either (i) a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects as

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provided in subdivision 1 of this definition, except that the emission rate specified by any applicable [state] implementation plan (or, in the absence of such a limit, the actual emission rate) shall be used, or (ii) the actual presence of a local nuisance caused by the existing stack, as determined by the board; and

3. For sources seeking credit after January 12, 1979, for a stack height determined under subdivision 2 of the GEP definition where the board requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984, based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not adequately represented by the equations in subdivision 2 of the GEP definition, a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects that is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

"Existing source" means any stationary source other than a new source or modified source.

"Facility" means something that is built, installed or established to serve a particular purpose; includes, but is not limited to, buildings, installations, public works, businesses, commercial and industrial plants, shops and stores, heating and power plants, apparatus, processes, operations, structures, and equipment of all types.

"Federal Clean Air Act" means 42 USC 7401 et seq., 91 Stat 685.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, ~~including and citizens under the federal Clean Air Act or that are enforceable under other statutes administered by the administrator. Federally enforceable limitations and conditions include, but are not limited to,~~ the following:

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~~1. Any requirement approved by the administrator pursuant to the provisions of § 111 or § 112 of the federal Clean Air Act;~~

~~2. Any applicable source-specific or source-category emission limit or requirement in an implementation plan;~~

~~3. Any permit requirements established pursuant to 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.), with the exception of terms and conditions established to address applicable state requirements, and~~

~~4. Any other applicable federal requirement:~~

~~1. Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to § 112 of the federal Clean Air Act as amended in 1990.~~

~~2. New source performance standards established pursuant to § 111 of the federal Clean Air Act, and emission standards established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.~~

~~3. All terms and conditions in a federal operating permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable.~~

~~4. Limitations and conditions that are part of an [approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP) implementation plan].~~

~~[5. Limitations and conditions that are part of a section 111(d) plan].~~

~~[5.6]. Limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by EPA in accordance with 40 CFR Part 51.~~

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~~[6.7]. Limitations and conditions that are part of an operating permit issued pursuant to a program approved by EPA into [a SIP an implementation plan] as meeting EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability.~~

~~[7.8]. Limitations and conditions in a Virginia regulation or program that has been approved by EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112 of the federal Clean Air Act.~~

~~[8.9]. Individual consent agreements that EPA has legal authority to create.~~

"Good engineering practice" or "GEP," with reference to the height of the stack, means the greater of:

1. 65 meters, measured from the ground-level elevation at the base of the stack;

2. a. For stacks in existence on January 12, 1979, and for which the owner had obtained all applicable permits or approvals required under 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.),

$$H_g = 2.5H,$$

provided the owner produces evidence that this equation was actually relied on in establishing an emission limitation;

b. For all other stacks,

$$H_g = H + 1.5L,$$

where:

H_g = good engineering practice stack height, measured from the ground-level elevation at the base of the stack,

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H = height of nearby structures measured from the ground-level elevation at the base of the stack,

L = lesser dimension, height or projected width, of nearby structures provided that the board may require the use of a field study or fluid model to verify GEP stack height for the source; or

3. The height demonstrated by a fluid model or a field study approved by the board, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

"Hazardous air pollutant" means an air pollutant to which no ambient air quality standard is applicable and which in the judgment of the administrator causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

"Implementation plan" means the portion or portions of the state implementation plan, or the most recent revision thereof, which has been approved under \S 110 of the federal Clean Air Act, or promulgated under \S 110(c) of the federal Clean Air Act, or promulgated or approved pursuant to regulations promulgated under \S 301(d) of the federal Clean Air Act and which implements the relevant requirements of the federal Clean Air Act.

~~["Initial emission test" means the test required by any regulation, permit issued pursuant to 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.), control program, compliance schedule or other enforceable mechanism for determining compliance with new or more stringent emission standards or permit limitations or other emission limitations requiring the installation or modification of air pollution control equipment or implementation of a control method. Initial emission tests shall be conducted in~~

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~~accordance with 9 VAC 5-40-30.]~~

~~["Initial performance test" means the test required by 40 CFR Part 60 or a permit issued pursuant to 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.) for determining initial compliance with standards of performance or permit limitations. Initial performance tests shall be conducted in accordance with 9 VAC 5-50-30.]~~

"Isokinetic sampling" means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

"Locality" means a city, town, county or other public body created by or pursuant to state law.

"Malfunction" means any sudden failure of air pollution control equipment, of process equipment, or of a process to operate in a normal or usual manner, which failure is not due to intentional misconduct or negligent conduct on the part of the owner or other person. ~~Failures that are caused in part by poor maintenance or careless operation are not malfunctions.~~

~~"Maintenance area" means any geographic region of the United States previously designated as a nonattainment area and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan and designated as such in 9 VAC 5-20-203.~~

"Metropolitan statistical area" means any area designated as such in 9 VAC 5-20-202.

"Monitoring device" means the total equipment used to measure and record (if applicable) process parameters.

"Nearby" as used in the definition of good engineering practice (GEP) is defined for a specific structure or terrain feature and:

1. For purposes of applying the formulae provided in subdivision 2 of the GEP definition means that distance up to five times the lesser of the height or the width dimension of a

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structure, but not greater than 0.8 kilometers (1/2 mile); and

2. For conducting demonstrations under subdivision 3 of the GEP definition means not greater than 0.8 kilometers (1/2 mile), except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height (Ht) of the feature, not to exceed two miles if such feature achieves a height (Ht) 0.8 kilometers from the stack that is at least 40% of the GEP stack height determined by the formulae provided in subdivision 2 b of the GEP definition or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

"Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in 40 CFR 60.

"Nonattainment area" means any area which is shown by air quality monitoring data or, where such data are not available, which is calculated by air quality modeling (or other methods determined by the board to be reliable) to exceed the levels allowed by the ambient air quality standard for a given pollutant including, but not limited to, areas designated as such in 9 VAC 5-20-204.

"One hour" means any period of 60 consecutive minutes.

"One-hour period" means any period of 60 consecutive minutes commencing on the hour.

"Organic compound" means any chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic disulfide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

"Owner" means any person, including bodies politic and corporate, associations, partnerships, personal representatives, trustees and committees, as well as individuals, who owns,

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leases, operates, controls or supervises a source.

"Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

"Particulate matter emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by the applicable reference method, or an equivalent or alternative method.

"PM₁₀" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the applicable reference method or an equivalent method.

"PM₁₀ emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by the applicable reference method, or an equivalent or alternative method.

"Performance test" means a test for determining emissions from new or modified sources.

"Person" means an individual, corporation, partnership, association, a governmental body, a municipal corporation, or any other legal entity.

"Pollutant" means any substance the presence of which in the outdoor atmosphere is or may be harmful or injurious to human health, welfare or safety, to animal or plant life, or to property, or which unreasonably interferes with the enjoyment by the people of life or property.

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or its effect on emissions is state and federally enforceable.

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"Prevention of significant deterioration area" means any area not designated as a nonattainment area in 9 VAC 5-20-204 for a particular pollutant and designated as such in 9 VAC 5-20-205.

"Proportional sampling" means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

"Public hearing" means, unless indicated otherwise, an informal proceeding, similar to that provided for in § 9-6.14:7.1 of the Administrative Process Act, held to afford persons an opportunity to submit views and data relative to a matter on which a decision of the board is pending.

"Reference method" means any method of sampling and analyzing for an air pollutant as described in the following EPA regulations:

1. For ambient air quality standards in 9 VAC 5 Chapter 30 (9 VAC 5-30-10 et seq.): the applicable appendix of 40 CFR 50 or any method that has been designated as a reference method in accordance with 40 CFR 53, except that it does not include a method for which a reference designation has been canceled in accordance with 40 CFR 53.11 or 40 CFR 53.16;

2. For emission standards in 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.) and 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.): ~~Appendix M of 40 CFR 51 or Appendix A of 40 CFR 60;~~ or

3. For emission standards in 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.): Appendix B of 40 CFR 61 ~~[or Appendix A of 40 CFR 63]~~.

"Regional director" means the regional director of an administrative region of the Department of Environmental Quality or a designated representative.

"Regulation of the board" means any regulation adopted by the State Air Pollution Control Board under any provision of the Code of Virginia.

"Regulations for the Control and Abatement of Air Pollution" means 9 VAC 5 Chapters 10

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(9 VAC 5-10-10 et seq.) through 80 (9 VAC 5-80-10 et seq.).

"Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified petroleum gases as determined by American Society for Testing and Materials, Standard D323-82, Test Method for Vapor Pressure of Petroleum Products (Reid Method) (see 9 VAC 5-20-21).

"Run" means the net period of time during which an emission sampling is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

~~["Section 111(d) plan" means the portion or portions of the plan, or the most recent revision thereof, which has been approved under 40 CFR 60.27(b) in accordance with § 111(d)(1) of the federal Clean Air Act, or promulgated under 40 CFR 60.27(d) in accordance with § 110(d)(2) of the federal Clean Air Act, and which implements the relevant requirements of the federal Clean Air Act.]~~

"Shutdown" means the cessation of operation of an affected facility for any purpose.

"Source" means any one or combination of the following: buildings, structures, facilities, installations, articles, machines, equipment, landcraft, watercraft, aircraft or other contrivances which contribute, or may contribute, either directly or indirectly to air pollution. Any activity by any person that contributes, or may contribute, either directly or indirectly to air pollution, including, but not limited to, open burning, generation of fugitive dust or emissions, and cleaning with abrasives or chemicals.

"Stack" means any point in a source designed to emit solids, liquids or gases into the air, including a pipe or duct, but not including flares.

"Stack in existence" means that the owner had:

1. Begun, or caused to begin, a continuous program of physical on site construction of the stack; or

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2. Entered into binding agreements or contractual obligations, which could not be canceled or modified without substantial loss to the owner, to undertake a program of construction of the stack to be completed in a reasonable time.

"Standard conditions" means a temperature of 20°C (68°F) and a pressure of 760 millimeters of Hg (29.92 inches of Hg).

"Standard of performance" means any provision of 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) which prescribes an emission limitation or other requirements that control air pollution emissions.

"Startup" means the setting in operation of an affected facility for any purpose.

"State enforceable" means all limitations and conditions which are enforceable by the board or department, including, but not limited to, those requirements developed pursuant to 9 VAC 5-20-110, requirements within any applicable regulation, order, consent agreement or variance, and any permit requirements established pursuant to 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.).

"State Implementation Plan" means the plan, including the most recent revision thereof, which has been approved or promulgated by the administrator, U.S. Environmental Protection Agency, under Section 110 of the federal Clean Air Act, and which implements the requirements of Section 110.

"Stationary source" means any building, structure, facility or installation which emits or may emit any air pollutant. A stationary source shall include all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual (see 9 VAC 5-20-21).

"These regulations" means 9 VAC 5 Chapters 10 (9 VAC 5-10-10 et seq.) through 80 (9

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VAC 5-80-10 et seq.).

"Total suspended particulate (TSP)" means particulate matter as measured by the reference method described in Appendix B of 40 CFR 50.

"True vapor pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute (API) Publication 2517, Evaporation Loss from External Floating-Roof Tanks (see 9 VAC 520-21). The API procedure may not be applicable to some high viscosity or high pour crudes. Available estimates of true vapor pressure may be used in special cases such as these.

"Urban area" means any area consisting of a core city with a population of 50,000 or more plus any surrounding localities with a population density of 80 persons per square mile and designated as such in 9 VAC 5-20-201.

"Vapor pressure," except where specific test methods are specified, means true vapor pressure, whether measured directly, or determined from Reid vapor pressure by use of the applicable nomograph in API Publication 2517, Evaporation Loss from External Floating-Roof Tanks (see 9 VAC 5-20-21).

"Virginia Air Pollution Control Law" means Chapter 13 (§ 10.1-1300 et seq.) of Title 10.1 of the Code of Virginia.

"Volatile organic compound" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.

1. This includes any such organic compounds which have been determined to have negligible photochemical reactivity other than the following:

- a. Methane;

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- b. Ethane;
- c. Methylene chloride (dichloromethane);
- d. 1,1,1-trichloroethane (methyl chloroform);
- e. 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
- f. Trichlorofluoromethane (CFC-11);
- g. Dichlorodifluoromethane (HCFC-12);
- h. Chlorodifluoromethane (CFC-22);
- i. Trifluoromethane (HFC-23);
- j. 1,2-dichloro 1,1,2,2,-tetrafluoroethane (CFC-114);
- k. Chloropentafluoroethane (CFC-115);
- l. 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
- m. 1,1,1,2-tetrafluoroethane (HFC-134a);
- n. 1,1-dichloro 1-fluoroethane (HCFC-141b);
- o. 1-chloro 1,1-difluoroethane (HCFC-142b);
- p. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
- q. Pentafluoroethane (HFC-125);
- r. 1,1,2,2-tetrafluoroethane (HFC-134);
- s. 1,1,1-trifluoroethane (HFC-143a);
- t. 1,1-difluoroethane (HFC-152a);
- u. Parachlorobenzotrifluoride (PCBTF);
- v. Cyclic, branched, or linear completely methylated siloxanes;
- w. Acetone;
- x. Perchloroethylene (tetrachloroethylene); and]

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- y- ~~3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);~~
- z- ~~1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);~~
- aa- ~~1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);~~
- bb- ~~Difluoromethane (HFC-32);~~
- cc- ~~Ethylfluoride (HFC-161);~~
- dd- ~~1,1,1,3,3,3-hexafluoropropane (HFC-236fa);~~
- ee- ~~1,1,2,2,3-pentafluoropropane (HFC-245ca);~~
- ff- ~~1,1,2,3,3-pentafluoropropane (HFC-245ea);~~
- gg- ~~1,1,1,2,3-pentafluoropropane (HFC-245eb);~~
- hh- ~~1,1,1,3,3-pentafluoropropane (HFC-245fa);~~
- ii- ~~1,1,1,2,3,3-hexafluoropropane (HFC-236ea);~~
- jj- ~~1,1,1,3,3-pentafluorobutane (HFC-365mfc);~~
- kk- ~~Chlorofluoromethane (HCFC-31);~~
- ll- ~~1 chloro-1-fluoroethane (HCFC-151a);~~
- mm- ~~1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);~~
- nn- ~~1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C₄F₉OCH₃);~~
- oo- ~~2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-hepta-fluoropropane
(C₂F₅(CF₂)₂OCH₂CF₂OCF₃);~~
- pp- ~~1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C₄F₉OC₂H₅);~~
- qq- ~~2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-hepta-fluoropropane
(C₂F₅(CF₂)₂OCH₂CF₂OC₂H₅);~~
- y r- ~~Methyl acetate; and~~
- ss-] Perfluorocarbon compounds which fall into these classes:

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- (1) Cyclic, branched, or linear, completely fluorinated alkanes;
- (2) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (3) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (4) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

2. For purposes of determining compliance with emissions standards, volatile organic compounds shall be measured by the appropriate reference method in accordance with the provisions of 9 VAC 5-40-30 or 9 VAC 5-50-30, as applicable. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as a volatile organic compound if the amount of such compounds is accurately quantified, and such exclusion is approved by the board.

3. As a precondition to excluding these compounds as volatile organic compounds or at any time thereafter, the board may require an owner to provide monitoring or testing methods and results demonstrating, to the satisfaction of the board, the amount of negligibly-reactive compounds in the emissions of the source.

4. Exclusion of the above compounds in this definition in effect exempts such compounds from the provisions of emission standards for volatile organic compounds. The compounds are exempted on the basis of being so inactive that they will not contribute significantly to the formation of ozone in the troposphere. However, this exemption does not extend to other properties of the exempted compounds which, at some future date, may require regulation and limitation of their use

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in accordance with requirements of the federal Clean Air Act.

"Welfare" means that language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.

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9 VAC 5 CHAPTER 20.

GENERAL PROVISIONS.

PART II.

Air Quality Programs.

9 VAC 5-20-180. Facility and control equipment maintenance or malfunction.

A. ~~[At all times, including periods of startup, shutdown and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment or monitoring equipment, in a manner consistent with good air pollution control practice of minimizing emissions. The provisions of this section apply to periods of excess emissions resulting from (i) the shutdown or bypassing, or both, of air pollution control equipment for necessary scheduled maintenance and (ii) malfunctions or other equipment failures of any affected facility or related air pollution control equipment. The provisions of subsection G of this section shall not apply to the following:~~

1. ~~Sources subject to the applicable subparts listed in 9 VAC 550-410 unless specifically allowed by the applicable subparts listed in 9 VAC 5-50-410.~~

2. ~~Sources subject to the applicable subparts listed in 9 VAC 5-60-70 unless specifically allowed by the applicable subparts listed in 9 VAC 5-60-70.~~

3. ~~Sources subject to the applicable subparts listed in 9 VAC 560-100 unless specifically allowed by the applicable subparts listed in 9 VAC 5-60-100.~~

4. ~~Sources and pollutants in areas where a single source or small group of sources has the potential to cause an exceedance of any ambient air quality standard or any ambient air increment prescribed under 9 VAC 5-80-1730.~~

5. ~~Affected units subject to a federal operating permit unless specifically allowed by the permit. This prohibition applies only to terms and conditions of the permit derived from the acid~~

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~~rain program.]~~

B. In case of shutdown or bypassing, or both, of air pollution control equipment for necessary scheduled maintenance which results in excess emissions for more than one hour, the intent to shut down such equipment shall be reported to the board and local air pollution control agency, if any, at least 24 hours prior to the planned shutdown. Such prior notice shall include, but is not limited to, the following:

1. Identification of the specific facility to be taken out of service as well as its location and permit or registration number;
2. The expected length of time that the air pollution control equipment will be out of service;
3. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period; and
4. Measures that will be taken to minimize the length of the shutdown ~~or and~~ to negate the effect of the outage of the air pollution control equipment.

C. In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than ~~four~~ six daytime business hours ~~after the malfunction is discovered~~, notify the board by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the ~~facility or control~~ equipment is again in operation,

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the owner shall notify the board.

D. In the event that the breakdown period cited in subsection C of this section exists or is expected to exist for 30 days or more, the owner shall, ~~within 30 days as expeditiously as possible but no later than 30 days after~~ of the failure or malfunction and semi-monthly thereafter until the failure or malfunction is corrected, submit to the board a written report containing the following:

1. Identification of the specific facility that is affected as well as its location and permit or registration number;
2. The expected length of time that the air pollution control equipment will be out of service;
3. The nature and quantity of air pollutant emissions likely to occur during the breakdown period;
4. Measures to be taken to reduce emissions to the lowest amount practicable during the breakdown period;
5. A statement as to why the owner was unable to obtain repair parts or perform repairs which would allow compliance with the ~~[provisions of these regulations~~ Regulations for the Control and Abatement of Air Pollution] within 30 days of the malfunction or failure;
6. An estimate, with reasons given, of the duration of the shortage of repairs or repair parts which would allow compliance with the ~~[provisions of these regulations~~ Regulations for the Control and Abatement of Air Pollution]; and
7. Any other pertinent information as may be requested by the board.

E. The provisions of subsection D of this section shall not apply beyond three months of the date of the malfunction or failure. Should the breakdown period exist past the three-month period, the owner may apply for a variance in accordance with 9 VAC 5-20-50 A.

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F. ~~The following special provisions govern facilities which are subject to the provisions of Article 3 (9 VAC 5-40-160 et seq.) of 9 VAC 5 Chapter 40, Article 3 (9 VAC 5-50-160 et seq.) of 9 VAC 5 Chapter 50, or Article 1 (9 VAC 5-60-60 et seq.) 9 VAC 5 Chapter 60:~~

~~1. Nothing in this section shall be understood to allow any such facility to operate in violation of applicable emission standards, except that all such facilities shall be subject to the reporting and notification procedures in this section.~~

~~2. Any facility which is subject to the provisions of Article 1 (9 VAC 5-60-60 et seq.) 9 VAC 5 Chapter 60 shall shut down immediately if it is unable to meet the applicable emission standards, and it shall not return to operation until it is able to operate in compliance with the applicable emission standards.~~

~~3. Regardless of any other provision of this section, any facility which is subject to the provisions of Article 3 (9 VAC 5-40-160 et seq.) of 9 VAC 5 Chapter 40 or Article 3 (9 VAC 5-50-160 et seq.) of 9 VAC 5 Chapter 50 shall shut down immediately upon request of the board if its emissions increase in any amount because of a bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment, and such facility shall not return to operation until it and the associated air pollution control equipment are able to operate in a proper manner. For sources subject to the applicable subparts listed in 9 VAC 5-60-100, the provisions of 40 CFR 63.6 governing malfunctions shall be implemented through this section. In cases where there are differences between the provisions of this section and the provisions of 40 CFR Part 63, the more restrictive provisions shall apply.~~

G. ~~[No If a] violation of applicable emission standards [or monitoring requirements shall be is] judged to have taken place [if the as a result of periods of] excess emissions [or cessation of monitoring activities is due to a malfunction subject to this section], [the owner is entitled to an affirmative~~

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~~defense for relief from penalties] provided [the owner proves] that:~~

1. The procedural requirements of this section ~~[are were]~~ met or the owner has submitted an acceptable application for a variance, which is subsequently granted;

2. ~~[The owner has taken expedient expeditious and reasonable measures to minimize emissions during the breakdown period. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of excess emissions];~~

3. ~~[The owner has taken expedient expeditious and reasonable measures to correct the malfunction and return the facility to a normal operation, and. Repairs were made in an expeditious fashion when the owner knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime shall have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;]~~

4. The source is in compliance at least 90% of the operating time over the most recent 12-month period[;

5. ~~The source is in compliance with any source-specific applicable requirements related to the provisions of this section;~~

6. ~~The excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner;~~

7. ~~The excess emissions (i) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (ii) could not have been avoided by better operation and maintenance practices;~~

8. ~~To the maximum extent practicable the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing~~

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emissions;

9. ~~All possible steps were taken to minimize the impact of the excess emissions on the ambient air quality;~~
10. ~~All emission monitoring systems were kept in operation if at all possible;~~
11. ~~The owner's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and~~
12. ~~The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance].~~

H. Nothing in this section shall be construed as giving an owner the right to increase temporarily the emission of pollutants or to circumvent the emission standards or monitoring requirements otherwise provided in ~~[these regulations the Regulations for the Control and Abatement of Air Pollution]~~.

I. Regardless of any other provision of this section, the owner of any facility subject to the ~~[provisions of these regulations Regulations for the Control and Abatement of Air Pollution]~~ shall, upon request of the board, reduce the level of operation at the facility if the board determines that this is necessary to prevent a violation of any ~~[primary] ambient air quality standard [or any ambient air increment prescribed under 9 VAC 5-80-1730]~~. Under worst case conditions, the board may order that the owner shut down the facility, if there is no other method of operation to avoid a violation of the ~~[primary] ambient air quality standard [or any ambient air increment prescribed under 9 VAC 5-80-1730]~~. The board reserves the right to prescribe the method of determining if a facility will cause such a violation. In such cases, the facility shall not be returned to operation until it and the associated air pollution control equipment are able to operate without violation of any ~~[primary] ambient air quality standard [or any ambient air increment prescribed under 9 VAC 5-80-1730]~~.

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J. Any owner of an affected facility subject to the provisions of this section shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. The records shall be maintained in a form suitable for inspection and maintained for at least two years following the date of the occurrence.

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9 VAC 5 CHAPTER 40.

EXISTING STATIONARY SOURCES.

PART I.

Special Provisions.

9 VAC 5-40-10. Applicability.

A. The provisions of this chapter, unless specified otherwise, shall apply to existing sources for which emission standards are prescribed under this chapter, ~~mobile sources and open burning.~~

B. The provisions of this chapter shall not apply to sources specified below except in cases where the provisions of this chapter are more restrictive than the provisions of 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.), 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.), or any permit issued pursuant to 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.); however, such sources shall be subject to the provisions of 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.).

1. Any stationary source (or portion of it), the construction, modification or relocation of which commenced on or after March 17, 1972.

2. Any stationary source (or portion of it), the reconstruction of which commenced on or after December 10, 1976.

C. If a facility becomes subject to any requirement in ~~these regulations~~ ~~the Regulations for the Control and Abatement of Air Pollution~~ because it exceeds an exemption level, the facility shall continue to be subject to all applicable requirements even if future conditions cause the facility to fall below the exemption level.

~~[D. Any owner subject to the provisions of this chapter may provide any report, notification or other document by electronic media if acceptable to both the owner and board.]~~

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[E. ~~The provisions of 9 VAC 5-40-20 K shall not apply to the following:~~

~~1. Sources and pollutants in areas where a single source or small group of sources has the potential to cause an exceedance of any ambient air quality standard or any ambient air increment prescribed under 9 VAC 5-80-1730.~~

~~2. Affected units subject to a federal operating permit unless specifically allowed by the permit. This prohibition applies only to terms and conditions of the permit derived from the acid rain program.]~~

9 VAC 5-40-20. Compliance.

A. Ninety days after the effective date of any emission standard prescribed under this chapter, no owner or other person shall operate any existing source in violation of such standard.

1. Compliance with standards in this chapter, other than opacity standards, shall be determined by emission tests established by 9 VAC 5-40-30, unless specified otherwise in the applicable standard.

~~2. Compliance with federal requirements in this chapter may be determined by alternative or equivalent methods only if approved by the administrator. For purposes of this subsection, federal requirements consist of the following:~~

~~a. New source performance standards established pursuant to § 111 of the federal Clean Air Act.~~

~~b. All terms and conditions in a federal operating permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable.~~

~~c. Limitations and conditions that are part of an [approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP) implementation plan].~~

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~~d. Limitations and conditions that are part of [an approved State Designated Pollutant Plan or a Federal Designated Pollutant Plan a section 111(d) plan].~~

~~e. Limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by EPA in accordance with 40 CFR Part 51.~~

~~f. Limitations and conditions that are part of an operating permit issued pursuant to a program approved by EPA into [a SIP an implementation plan] as meeting EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability.~~

~~23. Compliance with opacity standards in this chapter shall be determined by conducting observations in accordance with Reference Method 9 (see 9 VAC 5-20-21) or any alternative method, or as provided in subsection G 5 of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6minute averages) for the emission test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The results of continuous monitoring by transmissometer (which indicate that the opacity at the time visual observations were made was not in excess of the standard) are probative, but not conclusive evidence, of the actual opacity of an emission. In such cases, the owner must prove that, at the time of the alleged violation, the instrument used met Performance Specification 1 of Appendix B of 40 CFR 60, and had been properly maintained and calibrated, and that the resulting data has not been tampered with in any way.~~

~~[34. The opacity standards prescribed under this chapter shall apply at all times~~

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~~except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.]~~

B. No owner of an existing source subject to the provisions of this chapter shall fail to conduct emission tests as required under this chapter.

C. No owner of an existing source subject to the provisions of this chapter shall fail to install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions or process parameters or both as required under this chapter.

D. No owner of an existing source subject to the provisions of this chapter shall fail to provide notifications and reports, revise reports, maintain records or report emission test or monitoring results as required under this chapter.

E. At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

F. At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.

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~~G. Reserved The following provisions apply with respect to demonstrating compliance with opacity standards.~~

~~1. For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial emission test [required in 9 VAC 5-40-30] unless one of the following conditions apply.~~

~~a. If no emission test [under 9 VAC 5-40-30] is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after [initial startup of the facility the compliance date].~~

~~b. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial emission test [required under 9 VAC 5-40-30], the owner shall reschedule the opacity observations as soon after the initial emission test as possible, but not later than 30 days thereafter, and shall advise the board of the rescheduled date. In these cases, the 30-day prior notification to the board required by 9 VAC 5-40-50 A 3 shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial emission test [conducted under 9 VAC 5-40-30]. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial emission test in accordance with procedures contained in Reference Method 9.~~

~~Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner of an affected facility shall make available, upon request by the board, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence~~

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~~indicating proof of current visible observer emission certification. Except as provided in subsection G 5 of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided the source meets the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in Appendix B of 40 CFR 60 and has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.~~

2. ~~Except as provided in subsection G 3 of this section, the owner of an affected facility to which an opacity standard in this chapter applies shall conduct opacity observations in accordance with subsection A 2 of this section, shall record the opacity of emissions, and shall report to the board the opacity results along with the results of the initial emission test [required under 9 VAC 5-40-30]. The inability of an owner to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial emission test.~~

3. ~~The owner of an affected facility to which an opacity standard in this chapter applies may request the board to determine and to record the opacity of emissions from the affected facility during the initial emission test and at such times as may be required. The owner of the affected facility shall report the opacity results. Any request to the board to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in 9 VAC 5-40-50 A 3. If, for some reason, the board cannot determine and record the opacity of emissions from the affected facility during the emission test, then the provisions of subsection G 1 of this section shall apply.~~

4. ~~An owner of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial emission test [required by 9 VAC 5-40-30] and shall furnish the board a written report of the monitoring results along with Reference~~

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Method 9 and ~~[9 VAC 5-40-30 the initial]~~ emission test results.

5. ~~An owner of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any [required] emission test [required under 9 VAC 5-40-30] in lieu of Reference Method 9 observation data. If an owner elects to submit COMS data for compliance with the opacity standard, he shall notify the board of that decision, in writing, at least 30 days before any [required] emission test [required under 9 VAC 5-40-30] is conducted. Once the owner of an affected facility has notified the board to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests [required under 9 VAC 5-40-30] until the owner notifies the board, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a [required] emission test [required under 9 VAC 5-40-30] using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission test. Results of the COMS opacity determinations shall be submitted along with the results of the emission test [required under 9 VAC 5-40-30]. The owner of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 9 VAC 5-40-40 E, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Reference Method 9 data indicates noncompliance, the Reference Method 9 data will be used to determine opacity compliance.~~

6. ~~Upon receipt from an owner of the written reports of the results of the emission tests [required by 9 VAC 5-40-30], the opacity observation results and observer certification required by subsection G 1 of this section, and the COMS results, if applicable, the board will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to~~

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~~comply with an opacity standard, only those results are required to be submitted along with the emission test results [required by 9 VAC 5-40-30]. If the board finds that an affected facility is in compliance with all applicable standards for which emission tests are conducted in accordance with 9 VAC 5-40-30 but during the time such emission tests are being conducted fails to meet any applicable opacity standard, the board shall notify the owner and advise him that he may request a waiver from the board within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility in accordance with 9 VAC 5-40-120.~~

~~7. The board will grant such a petition upon a demonstration by the owner that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the emission tests; that the emission tests were performed under the conditions established by the board; that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard; and that the provisions of 9 VAC 5-40-120 are met.~~

~~8. The board will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the emission and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard.~~

~~H. The following provisions apply with respect to new or more stringent emission standards.~~

~~1. The following provisions apply with respect to emission standards for volatile organic compounds.~~

~~a. In the case of any emission standard for volatile organic compounds adopted by the board which is more stringent than the emission standard for the source in effect prior to such adoption, if any, or where there was no emission standard, the source shall not be considered in~~

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violation of the newly adopted emission standard provided that the owner accomplishes the following:

(1) Complies with the emission standard as expeditiously as possible but in no case later than one year after the effective date of the emission standard.

(2) Within one month of achieving compliance, notifies the board of same.

(3) Within six months of achieving compliance, demonstrates to the satisfaction of the board compliance with the emission standard.

b. The reprieve provided by subdivision H 1 a of this section shall only apply in cases where it is necessary for the owner to:

(1) Install emission control equipment or other equipment that alters the facility in order to comply with the emission standard; or

(2) Switch fuel or raw materials or both in order to comply with the emission standard.

c. Owners of sources not in compliance with the newly adopted emission standard, but in compliance with the provisions of subdivision H 1 a of this section shall not be subject to any penalties for violation of the newly adopted emission standard that may be required by the Virginia Air Pollution Control Law.

d. Any reprieve from the sanctions of any provision of the Virginia Air Pollution Control Law pursuant to subdivision H 1 a of this section shall not extend beyond the date by which compliance is to be achieved.

e. Nothing in subdivision H 1 a of this section shall prevent the board from promulgating a separate compliance schedule for any source if the board finds that it is technologically infeasible or it is infeasible due to the nonavailability of necessary equipment or materials or other

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circumstances beyond the owner's control for the source to achieve compliance within one year of the effective date of an emission standard.

f. All compliance schedules proposed or prescribed under this section shall provide for compliance with the applicable emission standards as expeditiously as practicable.

g. Any compliance schedule approved under this subsection may be revoked at any time if the source owner does not meet the stipulated increments of progress, and if the failure to meet an increment is likely to result in failure to meet the date for final compliance, and the failure to meet the increment is due to causes within the owner's control.

2. ~~The following provisions apply with respect to~~ emission standards for pollutants other than volatile organic compounds.

a. In the case of any emission standard adopted by the board which is more stringent than the emission standard for the source in effect prior to such adoption, if any, or where there was no emission standard, the source shall not be considered in violation of the newly adopted emission standard provided that the owner accomplishes the following:

(1) Submits in a form and manner satisfactory to the board, a control program showing how compliance shall be achieved within the time frame in the applicable compliance schedule prescribed under 9 VAC 5-40-21; or, where no applicable compliance schedule is prescribed under 9 VAC 5-40-21, how compliance shall be achieved as expeditiously as possible; but in no case later than three years after the effective date of such emission standard.

(2) Receives approval of the board of such control program.

(3) Complies with all provisions, terms and conditions of the control program including the increments of progress.

b. The reprieve provided by subdivision H 2 a of this section shall only

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apply in cases where it is necessary for the owner to:

(1) Install emission control equipment or other equipment that alters the facility in order to comply with the emission standard; or

(2) Switch fuel or raw materials or both in order to comply with the emission standard.

c. Owners of sources not in compliance with the newly adopted emission standard, but in compliance with the provisions of subdivision H 2 a of this section shall not be subject to any penalties for violation of the newly adapted emission standard that may be required by the Virginia Air Pollution Control Law.

d. Any reprieve from the sanctions of any provision of the Virginia Air Pollution Control Law pursuant to subdivision H 2 a of this section shall not extend beyond the date, specified in the emission standard or approved control program, by which compliance is to be achieved.

e. Control programs submitted under the provisions of subdivision H 2 a of this section shall be processed in accordance with the provisions of 9 VAC 5-20-170. However, if the control program contains a compliance schedule which conforms to the applicable schedule prescribed in 9 VAC 5-40-21, the public hearing provision of 9 VAC 5-20-170 shall not apply.

f. Nothing in this section shall prevent the board from promulgating a separate compliance schedule for any source if the board finds that the application of a compliance schedule in 9 VAC 5-40-21 is technologically infeasible, or if the board finds that the application of a compliance schedule in 9 VAC 5-40-21 is infeasible due to the nonavailability of necessary equipment or materials or other circumstances beyond the owner's control.

g. Nothing in this section shall prevent the owner of a source subject to a

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compliance schedule in 9 VAC 5-40-21 from submitting to the board a proposed alternative compliance schedule provided the following conditions are met:

(1) The proposed alternative compliance schedule is submitted within six months of the effective date of the emission standard;

(2) The final control plans for achieving compliance with the applicable emission standard are submitted simultaneously;

(3) The alternative compliance schedule contains the same increments of progress as the schedule for which it is proposed as an alternative; and

(4) Sufficient documentation is submitted by the owner of the source to justify the alternative dates proposed for the increments of progress.

h. All compliance schedules proposed or prescribed under this section shall provide for compliance with the applicable emission standards as expeditiously as practicable.

i. Any compliance schedule approved under this subsection may be revoked at any time if the source owner does not meet the stipulated increments of progress, and if the failure to meet an increment is likely to result in failure to meet the date for final compliance, and the failure to meet the increment is due to causes within the owner's control.

j. The provisions of 9 VAC 5-40-21 shall not apply to owners of sources which are in compliance with the applicable emission standard and for which the owners have determined and certified compliance to the satisfaction of the board within 12 months of the effective date of the applicable emission standard.

~~l. The following provisions apply with respect to stack heights.~~

1. The degree of emission limitation required of any source owner for control of any air pollutant shall not be affected in any manner by:

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a. So much of the stack height of any source as exceeds good engineering practice, or

b. Any other dispersion technique.

2. The provisions of subsection 1 shall not apply to:

a. Stack heights in existence, or dispersion techniques implemented on or before December 31, 1970, except where pollutants are being emitted from such stacks or using such dispersion techniques by sources, as defined in Section 111(a)(3) of the federal Clean Air Act, which were constructed, or reconstructed, or for which major modifications, as defined in Article 8 (9 VAC 5-80-1700 et seq.) of 9 VAC 5 Chapter 80 and 9 VAC 5-80-30, were carried out after December 31, 1970; or

b. Coal-fired steam electric generating units subject to the provisions of Section 118 of the federal Clean Air Act, which commenced operation before July 1, 1957, and whose stacks were constructed under a construction contract awarded before February 8, 1974.

3. Prior to the adoption of a new or revised emission limitation that is based on a good engineering practice stack height that exceeds the height allowed by subdivision 1 or 2 of the GEP definition, the board [~~must~~ shall] notify the public of the availability of the demonstration study and [~~must~~ shall] provide the opportunity for public hearing on it.

4. For purposes of subsection 1 of this section, such height shall not exceed the height allowed by subdivision 1 or 2 of the GEP definition unless the owner demonstrates to the satisfaction of the board, after 30 days notice to the public and opportunity for public hearing, that a greater height is necessary as provided under subdivision 3 of the GEP definition.

5. In no event may the board prohibit any increase in any stack height or restrict in any manner the maximum stack height of any source.

6. Compliance with emission standards in this chapter shall not be affected in any

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manner by the stack height of any source or any other dispersion technique.

~~J. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this chapter, nothing in this chapter shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate emission or compliance test or procedure had been performed.~~

~~[K. If a violation of applicable emission standards is judged to have taken place as a result of periods of excess emissions during startup or shutdown, the owner is entitled to an affirmative defense for relief from penalties provided the owner proves that:~~

~~1. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;~~

~~2. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;~~

~~3. If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;~~

~~4. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;~~

~~5. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;~~

~~6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;~~

~~7. All emission monitoring systems were kept in operation if at all possible;~~

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~~8. The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and~~

~~9. The owner or operator properly and promptly notified the appropriate regulatory authority.]~~

9 VAC 5-40-30. Emission testing.

A. Emission tests for existing sources shall be conducted and reported, and data shall be reduced as set forth in this chapter and in the appropriate reference methods; ~~if not appropriate, then equivalent or alternative methods shall be used unless the board (i) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (ii) approves the use of an equivalent method, (iii) approves the use of an alternative method the results of which the board has determined to be adequate for indicating whether a specific source is in compliance, (iv) waives the requirement for emission tests because the owner of a source has demonstrated by other means to the board's satisfaction that the affected facility is in compliance with the standard, or (v) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.~~ In cases where no appropriate reference method exists for an existing source subject to an emission standard for volatile organic compounds, the applicable test method in 9 VAC 5-20-121 may be considered appropriate.

B. Emission testing for existing sources shall be subject to testing guidelines approved by the board. Procedures may be adjusted or changed by the board to suit specific sampling conditions or needs based upon good practice, judgement and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards. Tests shall be performed under the direction of persons whose qualifications are acceptable to the board.

C. Emission tests for existing sources shall be conducted under conditions which the board

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shall specify to the owner, based on representative performance of the source. The owner shall make available to the board such records as may be necessary to determine the conditions of the emission tests. Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions of emission tests for the purpose of an emission test~~[nor shall During the initial emission test]~~ emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction ~~[shall not]~~ be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

D. An owner may request that the board determine the opacity of emissions from an existing source during the emission tests required by this section.

E. Each emission test for an existing source shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions acceptable to the board. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost, or if conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other circumstances beyond the owner's control, compliance may, upon the approval of the board, be determined using the arithmetic mean of the results of the two other runs.

F. The board may test emissions of air pollutants from any existing source. Upon request of the board the owner shall provide, or cause to be provided, emission testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such source. ~~This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct [free of cyclonic flow with acceptable flow characteristics] during emission tests,~~

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~~as demonstrated by applicable test methods and procedures.~~

2. Safe sampling platforms.
3. Safe access to sampling platforms.
4. Utilities for sampling and testing equipment.

G. Upon request of the board the owner of any existing source subject to the provisions of this chapter shall conduct emission tests in accordance with procedures approved by the board.

9 VAC 5-40-40. Monitoring.

A. Unless otherwise approved by the board, owners of existing sources specified in the applicable emission standard shall install, calibrate, maintain and operate systems for continuously monitoring and recording emissions of specified pollutants. ~~For the purposes of this section, all continuous monitoring systems required under the applicable emission standard shall be subject to the provisions of the performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in this part, in an applicable standard or by the board.~~ However, nothing in this chapter shall exempt any owner from complying with subsection ~~F~~ G of this section.

B. All continuous monitoring systems and monitoring devices shall be installed and operational by July 5, 1983. Verification of operational status shall, as a minimum, consist of the completion of the conditioning period specified by applicable requirements in Appendix B of 40 CFR 60.

C. Within 30 days after the date set forth in subsection B of this section and at such other times as may be requested by the board, the owner of any existing source shall conduct continuous monitoring system performance evaluations and furnish the board within 60 days of them two or, upon request, more copies of a written report of the results of such tests.

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~~D. If the owner of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 9 VAC 5-40-20 G 5, he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1 in Appendix B of 40 CFR 60 before the [required] emission test [required under 9 VAC 5-40-30] is conducted. Otherwise, the owner of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any [required] emission test [required under 9 VAC 5-40-30] or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the board.~~

~~1. The owner of an affected facility using a COMS to determine opacity compliance during any [required] emission test [required under 9 VAC 5-40-30] and as described in 9 VAC 5-40-20 G 5 shall furnish the board two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in this subsection at least 10 days before the emission test [required under 9 VAC 5-40-30] is conducted.~~

~~2. Except as provided in subdivision 1 of this subsection, the owner of an affected facility shall furnish the board within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.~~

~~D E. Unless otherwise approved by the board, all continuous monitoring systems required by subsection A of this section shall be installed, calibrated, maintained and operated in accordance with applicable requirements in this section, 9 VAC 5-40-41, and the applicable emission standard.~~

~~E E. After receipt and consideration of written application, the board may approve alternatives to any monitoring procedures or requirements of this chapter including, but not limited to, the following:~~

~~1. Alternative monitoring requirements when installation of a continuous monitoring~~

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system or monitoring device specified by this chapter would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases;-

2. Alternative monitoring requirements when the source is infrequently operated;-
3. Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions;-
4. Alternative locations for installing continuous monitoring systems or monitoring devices when the owner can demonstrate the installation at alternate locations will enable accurate and representative measurements;-
5. Alternative methods of converting pollutant concentration measurements to units of the standards;-
6. Alternative procedures for computing emission averages that do not require integration of data (e.g., some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period);-
7. Alternative monitoring requirements when the effluent from a single source or the combined effluent from two or more sources are released to the atmosphere through more than one point;-
8. Alternative procedures for performing calibration checks;-
9. Alternative monitoring requirements when the requirements of this section would impose an extreme economic burden on the owner;-
10. Alternative monitoring requirements when the continuous monitoring systems cannot be installed due to physical limitations at the source;~~and~~.-
11. Alternative continuous monitoring systems that do not meet the design or

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performance requirements in Performance Specification 1 of Appendix B of 40 CFR 60, but which adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1 of Appendix B of 40 CFR 60. The board may require that such demonstration be performed for each source.

~~[12. Alternative monitoring systems that meet the requirements of 40 CFR Part 75 (i) if a source is subject to 40 CFR Part 75 or (ii) if the board determines that the requirements of 40 CFR Part 75 are more appropriate for the source than the pertinent provisions of this chapter.]~~

~~— F G.~~ Upon request of the board, the owner of an existing source subject to the provisions of this chapter shall install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions or process parameters or both in accordance with methods and procedures acceptable to the board.

9 VAC 5-40-50. Notification, records and reporting.

A. Any owner of an existing source subject to the provisions of this chapter shall provide written notifications to the board of the following:

1. The date upon which demonstration of the continuous monitoring system performance begins in accordance with 9 VAC 5-40-40 C. Notification shall be postmarked not less than 30 days prior to such date.

2. The date of any emission test the owner wishes the board to consider in determining compliance with a standard. Notification shall be postmarked not less than 30 days prior to such date.

~~3. The anticipated date for conducting the opacity observations required by 9 VAC 5-40-20 G 1. The notification shall also include, if appropriate, a request for the board to provide a visible~~

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~~emissions reader during an emission test. The notification shall be postmarked not less than 30 days prior to such date.~~

4. ~~That continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during [an a required] emission test [required by 9 VAC 5-40-30] in lieu of Reference Method 9 observation data as allowed by 9 VAC 540-20 G 5. This notification shall be postmarked not less than 30 days prior to the date of the emission test.~~

B. Any owner of an existing source subject to the provisions of 9 VAC 540-40 A shall maintain records of the occurrence and duration of any startup, shutdown or malfunction in the operation of such source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

C. Each owner required to install a continuous monitoring system ~~(CMS) or monitoring device~~ shall submit a written report of excess emissions (as defined in the applicable emission standard) and monitoring systems performance report or a summary report form, or both, to the board for every calendar quarter semiannually, except when: more frequent reporting is specifically required by an applicable emission standard; ~~[or the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted;]~~ or the board, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. ~~The summary report and form shall meet the requirements of 40 CFR 60.7(d). The frequency of reporting requirements may be reduced as provided in 40 CFR 60.7(e). All quarterly reports shall be postmarked by the 30th day following the end of each [calendar quarter and half (or quarter, as appropriate) six month period].~~ Written reports of excess emissions shall include the following information:

1. The magnitude of excess emissions computed in accordance with 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each

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period of excess emissions; ~~The process operating time during the reporting period.~~

2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; ~~and.~~

4. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

D. Any owner of an existing source subject to the provisions of this chapter shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and emission testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this chapter recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.

E. Any data or information required by ~~these regulations the Regulations for the Control and Abatement of Air Pollution~~, any permit or order of the board, or which the owner wishes the board to consider, to determine compliance with an emission standard [~~must shall~~] be recorded or maintained in a time frame consistent with the averaging period of the standard.

F. The owner of a stationary source shall keep records as may be necessary to determine its emissions. Any owner claiming that a facility is exempt from the provisions of ~~these regulations the Regulations for the Control and Abatement of Air Pollution~~ shall keep records as may be necessary to

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demonstrate to the satisfaction of the board its continued exempt status.

G. The owner of an existing source subject to any emission standard in Article 26 (9 VAC 5-40-3560 et seq.) through Article 36 (9 VAC 5-40-5060 et seq.) of 9 VAC 5 Chapter 40 shall maintain records in accordance with the applicable procedure in 9 VAC 5-20-121.

H. Upon request of the board, the owner of an existing source subject to the provisions of this chapter shall provide notifications and report, revise reports, maintain records or report emission test or monitoring result in a manner and form and using procedures acceptable to board.

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9 VAC 5 CHAPTER 50.

NEW AND MODIFIED STATIONARY SOURCES.

PART I.

Special Provisions.

9 VAC 5-50-10. Applicability

A. The provisions of this chapter, unless specified otherwise, shall apply to new and modified sources.

B. The provisions of this chapter shall apply to sources specified below:

1. Any stationary source (or portion of it), the construction, modification or relocation of which commenced on or after March 17, 1972.

2. Any stationary source (or portion of it), the reconstruction of which commenced on or after December 10, 1976.

C. If a facility becomes subject to any requirement in ~~these regulations~~ the Regulations for the Control and Abatement of Air Pollution because it exceeds an exemption level, the facility shall continue to be subject to all applicable requirements even if future conditions cause the facility to fall below the exemption level.

D. The provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), unless specified otherwise, shall apply to new and modified sources to the extent that those provisions thereof are more restrictive than the provisions of this chapter, 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.), or any permit issued pursuant to 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.).

E. ~~For sources subject to the applicable subparts listed in 9 VAC 5-50-410, the provisions of 40 CFR 60.7, 40 CFR 60.8, 40 CFR 60.11 and 40 CFR 60.13 shall be implemented through this part. In cases where there are differences between the provisions of this part and the provisions of 40 CFR Part~~

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~~60, the more restrictive provisions shall apply.~~

~~[E. Any owner subject to the provisions of this chapter may provide any report, notification or other document by electronic media if acceptable to both the owner and board.]~~

~~[G. The provisions of 9 VAC 5-50-20 J shall not apply to the following:~~

~~1. Sources subject to the applicable subparts listed in 9 VAC 550-410 unless specifically allowed by the applicable subparts listed in 9 VAC 5-50-410.~~

~~2. Sources and pollutants in areas where a single source or small group of sources has the potential to cause an exceedance of any ambient air quality standard or any ambient air increment prescribed under 9 VAC 5-80-1730.~~

~~3. Affected units subject to a federal operating permit unless specifically allowed by the permit. This prohibition applies only to terms and conditions of the permit derived from the acid rain program.]~~

9 VAC 5-50-20. Compliance.

A. Sixty days after achieving the maximum production rate, but not later than 180 days after initial start-up, no owner or other person shall operate any new or modified source in violation of any standard of performance prescribed under this chapter.

1. Compliance with standards in this chapter, other than opacity standards, shall be determined by performance tests established by 9 VAC 550-30, unless specified otherwise in the applicable standard.

~~2. Compliance with federal requirements in this chapter may be determined by alternative or equivalent methods only if approved by the administrator. For purposes of this subsection, federal requirements consist of the following:~~

~~a. New source performance standards established pursuant to § 111 of the~~

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~~federal Clean Air Act.~~

~~b. All terms and conditions in a federal operating permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable.~~

~~c. Limitations and conditions that are part of an [approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP) implementation plan].~~

~~d. Limitations and conditions that are part of [an approved State Designated Pollutant Plan or a Federal Designated Pollutant Plan a section 111(d) plan].~~

~~e. Limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by EPA in accordance with 40 CFR Part 51.~~

~~f. Limitations and conditions that are part of an operating permit issued pursuant to a program approved by EPA into [a SIP an implementation plan] as meeting EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability.~~

2.3. Compliance with opacity standards in this chapter shall be determined by conducting observations in accordance with Reference Method 9 or any alternative method, if specified in the permit granted pursuant to 9 VAC 5 Chapter 80 (9 VAC 580-10 et seq.), or as provided in subsection G 5 of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The results of continuous

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~~monitoring by transmissometer which indicated that the opacity at the time observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission. In such cases, the owner must prove that, at the time of the alleged violation, the instrument used met Performance Specification 1 of Appendix B of 40 CFR 60, and had been properly maintained and calibrated, and that the resulting data had not been tampered with in any way.~~

~~[3 4. The opacity standards prescribed under this chapter shall apply at all times except during periods of startup, shutdown, malfunction and as otherwise provided in the applicable standard.~~

~~4 5]. Variation from a specified standard may be granted by the board for a definite period for testing and adjustment.~~

B. No owner of a new or modified source subject to the provisions of this chapter shall fail to conduct performance tests as required under this chapter.

C. No owner of a new or modified source subject to the provisions of this chapter shall fail to install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions or process parameters or both as required under this chapter.

D. No owner of a new or modified source subject to the provisions of this chapter shall fail to provide notifications and reports, revise reports, maintain records or report performance test or monitoring results as required under this chapter.

E. At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring

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results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

F. At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.

~~G. Reserved The following provisions apply with respect to compliance with opacity standards.~~

~~1. For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test [required in 9 VAC 5-50-30] unless one of the following conditions apply.~~

~~a. If no performance test [under 9 VAC 5-50-30] is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility.~~

~~b. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test [required under 9 VAC 5-50-30], the owner shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the board of the rescheduled date. In these cases, the 30-day prior notification to the board required by 9 VAC 5-50-50 A 6 shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test [conducted under 9 VAC 5-50-30]. The visible emissions~~

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~~observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Reference Method 9.~~

~~Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner of an affected facility shall make available, upon request by the board, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in subsection G 5 of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided the source meets the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in Appendix B of 40 CFR 60 and has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.~~

~~2. Except as provided in subsection G 3 of this section, the owner of an affected facility to which an opacity standard in this chapter applies shall conduct opacity observations in accordance with subsection A 2 of this section, shall record the opacity of emissions, and shall report to the board the opacity results along with the results of the initial performance test [required under 9 VAC 5-50-30]. The inability of an owner to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.~~

~~3. The owner of an affected facility to which an opacity standard in this chapter applies may request the board to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner of the~~

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~~affected facility shall report the opacity results. Any request to the board to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in 9 VAC 5-50-50 A 6. If, for some reason, the board cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of subsection G 1 of this section shall apply.~~

~~4. An owner of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test [required by 9 VAC 5-50-30] and shall furnish the board a written report of the monitoring results along with Reference Method 9 and [9 VAC 5-50-30 the initial] performance test results.~~

~~5. An owner of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any [required] performance test [required under 9 VAC 5-50-30] in lieu of Reference Method 9 observation data. If an owner elects to submit COMS data for compliance with the opacity standard, he shall notify the board of that decision, in writing, at least 30 days before any [required] performance test [required under 9 VAC 5-50-30] is conducted. Once the owner of an affected facility has notified the board to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests [required under 9 VAC 5-50-30] until the owner notifies the board, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a [required] performance test [required under 9 VAC 5-50-30] using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test [required under 9 VAC 5-50-30]. The owner of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 9 VAC 5-50-40 E, that~~

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~~the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Reference Method 9 data indicates noncompliance, the Reference Method 9 data will be used to determine opacity compliance.~~

6. ~~Upon receipt from an owner of the written reports of the results of the performance tests [required by 9 VAC 5-50-30], the opacity observation results and observer certification required by subsection G 1 of this section, and the COMS results, if applicable, the board will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results [required by 9 VAC 5-50-30]. If the board finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with 9 VAC 5-50-30 but during the time such performance tests are being conducted fails to meet any applicable opacity standard, the board shall notify the owner and advise him that he may request a waiver from the board within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility in accordance with 9 VAC 5-50-120.~~

7. ~~The board will grant such a petition upon a demonstration by the owner that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the board; that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard; and that the provisions of 9 VAC 5-50-120 are met.~~

8. ~~The board will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and~~

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~~opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard.~~

H. ~~The following provisions apply with respect to~~ stack heights.

1. The degree of emission limitation required of any source owner for control of any air pollutant shall not be affected in any manner by:

a. So much of the stack height of any source as exceeds good engineering practice, or

b. Any other dispersion technique.

2. The provisions of subsection H 1 shall not apply to:

a. Stack heights in existence, or dispersion techniques implemented on or before December 31, 1970, except where pollutants are being emitted from such stacks or using such dispersion techniques by sources, as defined in Section 111(a)(3) of the federal Clean Air Act, which were constructed, or reconstructed, or for which major modifications, as defined in 9 VAC 5-30-20 and 9 VAC 5-30-30, were carried out after December 31, 1970; or

b. Coal-fired steam electric generating units subject to the provisions of Section 118 of the federal Clean Air Act, which commenced operation before July 1, 1957, and whose stacks were constructed under a construction contract awarded before February 8, 1974.

3. Prior to the adoption of a new or revised emission limitation that is based on a good engineering practice stack height that exceeds the height allowed by paragraphs 1 or 2 of the GEP definition, the board ~~[must shall]~~ notify the public of the availability of the demonstration study and ~~[must shall]~~ provide opportunity for public hearing on it.

4. For purposes of subsection H of this section, such height shall not exceed the height allowed by paragraphs 1 or 2 of the GEP definition unless the owner demonstrates to the

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satisfaction of the board, after 30 days notice to the public and opportunity for public hearing, that a greater height is necessary as provided under paragraph 3 of the GEP definition.

5. In no event may the board prohibit any increase in any stack height or restrict in any manner the maximum stack height of any source.

6. Compliance with standards of performance in this chapter shall not be affected in any manner by the stack height of any source or any other dispersion technique.

~~I. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this chapter, nothing in this chapter shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.~~

~~[J. If a violation of applicable emission standards is judged to have taken place as a result of periods of excess emissions during startup or shutdown, the owner is entitled to an affirmative defense for relief from penalties provided the owner proves that:~~

~~1. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;~~

~~2. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;~~

~~3. If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;~~

~~4. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;~~

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- ~~5. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;~~
- ~~6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;~~
- ~~7. All emission monitoring systems were kept in operation if at all possible;~~
- ~~8. The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and~~
- ~~9. The owner or operator properly and promptly notified the appropriate regulatory authority.]~~

9 VAC 5-50-30. Performance testing.

A. Performance tests for new or modified sources shall be conducted and reported and data shall be reduced as set forth in this chapter and the test methods and procedures contained in each applicable subpart listed in 9 VAC 5-50-410 ~~unless the board (i) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (ii) approves the use of an equivalent method, (iii) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (iv) waives the requirement for performance tests because the owner of a source has demonstrated by other means to the board's satisfaction that the affected facility is in compliance with the standard, or (v) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Any new or modified source, for which no standards of performance are set forth in Article 5 (9 VAC 5-50-400 et seq.) of this chapter, shall be performance tested by appropriate reference methods; if not appropriate, then equivalent or alternative methods shall be used unless the board (i) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (ii) approves the use~~

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~~of an equivalent method, (iii) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (iv) waives the requirement for performance tests because the owner of a source has demonstrated by other means to the board's satisfaction that the affected facility is in compliance with the standard, or (v) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.~~

In cases where no appropriate reference method exists for a new or modified source subject to a standard of performance for volatile organic compounds, the test methods in 9 VAC 5-20-121 may be considered appropriate.

B. Performance testing for new or modified sources shall be subject to testing guidelines approved by the board. Procedures may be adjusted or changed by the board to suit specific sampling conditions or needs based upon good practice, judgment and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established standards. Tests shall be performed under the direction of persons whose qualifications are acceptable to the board.

C. Performance tests for new or modified sources shall be conducted under conditions which the board shall specify to the owner based on representative performance of the source. The owner shall make available to the board such records as may be necessary to determine the conditions of the performance tests. Operation during periods of startup, shutdown and malfunction shall not constitute representative conditions of performance tests for the purpose of a performance test. ~~nor shall~~ ~~During the initial performance test] emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction [shall not] be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.~~

D. An owner may request that the board determine the opacity of emissions from a new or modified source during the performance tests required by this section.

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E. Unless specified otherwise in the applicable standard, each performance test for a new or modified source shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or if conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other circumstances beyond the owner's control, compliance may, upon the approval of the board, be determined using the arithmetic mean of the results of the two other runs.

F. The board may test emissions of air pollutants from any new or modified source. Upon request of the board the owner shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such source; ~~This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct [free of cyclonic flow with acceptable flow characteristics] during performance tests, as demonstrated by applicable test methods and procedures.~~

2. Safe sampling platforms;.

3. Safe access to sampling platforms;.

4. Utilities for sampling and testing equipment.

G. Upon request of the board, the owner of any new or modified source subject to the provisions of this chapter shall conduct performance tests in accordance with procedures approved by the board.

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9 VAC 5-50-40. Monitoring.

A. Unless otherwise approved by the board or specified in applicable subparts listed in 9 VAC 5-50-410, the requirements of this section shall apply to all continuous monitoring systems required for affected facilities in accordance with applicable subparts listed in 9 VAC 5-50-410. ~~For the purposes of this section, all continuous monitoring systems required under applicable subparts listed in 9 VAC 5-50-410 shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart listed in 9 VAC 5-50-410 or by the board.~~ However, nothing in this chapter shall exempt any owner from complying with subsection ~~F~~ G of this section.

B. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device.

C. During any performance tests required under 9 VAC 5-50-30 or within 30 days thereafter and at such other times as may be requested by the board, the owner of any affected facility shall conduct continuous monitoring system performance evaluations and furnish the board within 60 days of them two or, upon request, more copies of a written report of the results of such tests. These continuous monitoring system performance evaluations shall be conducted in accordance with the requirements and procedures contained in the applicable performance specification of Appendix B of 40 CFR 60.

D. ~~If the owner of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 9 VAC 5-50-20 G 5, he shall~~

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~~conduct a performance evaluation of the COMS as specified in Performance Specification 1 in Appendix B of 40 CFR 60 before the [required] performance test [required under 9 VAC 5-50-30] is conducted. Otherwise, the owner of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any [required] performance test [required under 9 VAC 5-50-30] or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the board.~~

~~1. The owner of an affected facility using a COMS to determine opacity compliance during any [required] performance test [required under 9 VAC 5-50-30] and as described in 9 VAC 5-50-20 G 5 shall furnish the board two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in this subsection at least 10 days before the performance test [required under 9 VAC 5-50-30] is conducted.~~

~~2. Except as provided in subdivision 1 of this subsection, the owner of an affected facility shall furnish the board within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.~~

~~— D E. Unless otherwise approved by the board, all continuous monitoring systems required by subsection A of this section shall be installed, calibrated, maintained and operated in accordance with applicable requirements in this section, 40 CFR 60.13 and the applicable subpart listed in 9 VAC 5-50-410.~~

~~— E E. After receipt and consideration of written application, the board may approve alternatives to any monitoring procedures or requirements of this chapter including, but not limited to, the following:~~

~~1. Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this chapter would not provide accurate measurements due to~~

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liquid water or other interferences caused by substances with the effluent gases;-

2. Alternative monitoring requirements when the affected facility is infrequently operated;-

3. Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions;-

4. Alternative locations for installing continuous monitoring systems or monitoring devices when the owner can demonstrate that installation at alternate locations will enable accurate and representative measurements;-

5. Alternative methods of converting pollutant concentration measurements to units of the applicable standards;-

6. Alternative procedures for performing daily checks or zero and span drift that do not involve use of span gases or test cells;-

7. Alternatives to the ASTM test methods or sampling procedures specified by any subpart listed in 9 VAC 5-50-410;-

8. Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1 or of Appendix B of 40 CFR 60, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1 of Appendix B of 40 CFR 60. The board may require that demonstration be performed for each affected facility;-and-

9. Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

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~~[10. Alternative monitoring systems that meet the requirements of 40 CFR Part 75 (i) if a source is subject to 40 CFR Part 75 or (ii) if the board determines that the requirements of 40 CFR Part 75 are more appropriate for the source than the pertinent provisions of this chapter.]~~

~~F G.~~ Upon request of the board, the owner of a new or modified source subject to the provisions of this chapter shall install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions or process parameters or both in accordance with methods and procedures acceptable to the board.

9 VAC 5-50-50. Notification, records and reporting.

A. Any owner of a new or modified source subject to the provisions of this chapter shall provide written notifications to the board of the following:

1. The date of commencement of construction, reconstruction or modification of a new or modified source postmarked no later than 30 days after such date~~;~~.
2. The anticipated date of initial startup of a new or modified source postmarked not more than 60 days nor less than 30 days prior to such date~~;~~.
3. The actual date of initial startup of a new or modified source postmarked within 15 days after such date~~;~~.
4. The date of any performance test required by 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.) and any other performance test the owner wishes the board to consider in determining compliance with a standard. Notification shall be postmarked not less than 30 days prior to such date~~;~~ and.
5. The date upon which demonstration of the continuous monitoring system performance begins in accordance with 9 VAC 5-50-40 C. Notification shall be postmarked not less than 30 days prior to such date.

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~~6. The anticipated date for conducting the opacity observations required by 9 VAC 5-50-20 G 1. The notification shall also include, if appropriate, a request for the board to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.~~

~~7. That continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a [required] performance test [required by 9 VAC 5-50-30] in lieu of Reference Method 9 observation data as allowed by 9 VAC 5-50-20 G 5. This notification shall be postmarked not less than 30 days prior to the date of the performance test.~~

B. Any owner of a new or modified source subject to the provisions of 9 VAC 5-50-40 A shall maintain records of the occurrence and duration of any startup, shutdown or malfunction in the operation of such source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

C. Each owner required to install a continuous monitoring system (CMS) or monitoring device shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and monitoring systems performance report or a summary report form, or both, to the board for every calendar quarter semiannually, except when more frequent reporting is specifically required by an applicable subpart listed in 9 VAC 5-50-410; ~~for the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted;~~ or the board, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. The summary report and form shall meet the requirements of 40 CFR 60.7(d). The frequency of reporting requirements may be reduced as provided in 40 CFR 60.7(e). All quarterly reports shall be postmarked by the 30th day following the end of each ~~calendar quarter and half (or quarter, as appropriate) six month period].~~ Written reports of excess emissions shall include the

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following information:

1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions; ~~The process operating time during the reporting period.~~

2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; ~~and.~~

4. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

D. Any owner of a new or modified source subject to the provisions of this chapter shall maintain a file of all measurements, including continuous monitoring ~~system, monitoring device, and performance~~ testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this chapter recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports and records.

E. Any data or information required by ~~these regulations the Regulations for the Control and Abatement of Air Pollution~~, any permit or order of the board, or which the owner wishes the board to consider, to determine compliance with an emission standard ~~[must shall]~~ be recorded or maintained in a time frame consistent with the averaging period of the standard.

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F. The owner of a stationary source shall keep records as necessary to determine its emissions. Any owner claiming that a facility is exempt from the provisions of ~~these regulations~~ ~~the Regulations for the Control and Abatement of Air Pollution~~ shall keep records to demonstrate its continued exempt status.

G. The owner of a new or modified source subject to any volatile organic compound emission standard for a coating operation or printing process shall maintain records in accordance with the applicable procedure in 9 VAC 5-20-121.

H. Upon request of the board, the owner of a new or modified source subject to the provisions of this chapter shall provide notifications and reports, maintain records or report performance test or monitoring results in a manner and form and using procedures acceptable to the board.

REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION
9 VAC 5 CHAPTER 60.

HAZARDOUS AIR POLLUTANT SOURCES.

PART I.

Special Provisions.

9 VAC 5-60-10. Applicability.

A. The provisions of this chapter shall apply to all existing, new and modified hazardous air pollutant sources for which emission standards are prescribed under this chapter.

~~B. For sources subject to the applicable subparts listed in 9 VAC 5-60-70, the provisions of 40 CFR 61.09, 40 CFR 61.10, 40 CFR 61.12, 40 CFR 61.13, and 40 CFR 61.14 shall be implemented through this part. In cases where there are differences between the provisions of this part and the provisions of 40 CFR Part 61, the more restrictive provisions shall apply.~~

~~C. For sources subject to the applicable subparts listed in 9 VAC 5-60-100, the provisions of 40 CFR 63.6, 40 CFR 63.7, 40 CFR 63.8, 40 CFR 63.9, 40 CFR 63.10 and 40 CFR 63.11 shall be implemented through this part. In cases where there are differences between the provisions of this part and the provisions of 40 CFR Part 63, the more restrictive provisions shall apply.~~

~~[D. Any owner subject to the provisions of this chapter may provide any report, notification or other document by electronic media if acceptable to both the owner and board.]~~

~~[E. The provisions of 9 VAC 5-60-20 F shall not apply to the following: 1.~~

~~Sources subject to the applicable subparts listed in 9 VAC 5-60-70 unless specifically allowed by the applicable subparts listed in 9 VAC 5-60-70.~~

~~2. Sources subject to the applicable subparts listed in 9 VAC 5-60-100 unless specifically allowed by the applicable subparts listed in 9 VAC 5-60-100.]~~

9 VAC 5-60-20. Compliance.

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A. Ninety days after the effective date of any emission standard prescribed under this chapter no owner or other person shall operate any existing hazardous air pollutant source in violation of such standard. After the effective date of any emission standard prescribed under this chapter no owner or other person shall operate any new or modified hazardous air pollutant source in violation of such standard.

1. Compliance with standards in this chapter, ~~other than visible emission standards~~ shall be determined by emission tests established by 9 VAC 5-60-30, unless specified otherwise in the applicable standard.

2. ~~The visible emission standards prescribed under this part shall apply at all times. Compliance with federal requirements in this chapter may be determined by alternative or equivalent methods only if approved by the administrator. For purposes of this subsection, federal requirements consist of the following:~~

a. ~~Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to § 112 of the federal Clean Air Act as amended in 1990.~~

b. ~~Emission standards established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.~~

c. ~~All terms and conditions in a federal operating permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable.~~

d. ~~Limitations and conditions that are part of an [approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP) implementation plan].~~

e. ~~Limitations and conditions that are part of [an approved State Designated~~

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~~Pollutant Plan or a Federal Designated Pollutant Plan a section 111(d) plan].~~

~~f. Limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by EPA in accordance with 40 CFR Part 51.~~

~~g. Limitations and conditions that are part of an operating permit issued pursuant to a program approved by EPA into [a SIP an implementation plan] as meeting EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability.~~

~~h. Limitations and conditions in a Virginia regulation or program that has been approved by EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112.~~

B. No owner of a hazardous air pollutant source subject to the provisions of this chapter shall fail to conduct emission tests as required under this chapter.

C. No owner of a hazardous air pollutant source subject to the provisions of this chapter shall fail to install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions, process parameters or air quality, or both, as required in this chapter.

D. No owner of a hazardous air pollutant source subject to the provisions of this chapter shall fail to provide notifications and reports, revise reports, maintain records or report emission test or monitoring results, or both, as required under this chapter.

~~E. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this chapter, nothing in this chapter shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or~~

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~~compliance test or procedure had been performed.~~

~~[E. If a violation of applicable emission standards is judged to have taken place as a result of periods of excess emissions during startup or shutdown, the owner is entitled to an affirmative defense for relief from penalties provided the owner proves that:~~

~~1. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;~~

~~2. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;~~

~~3. If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;~~

~~4. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;~~

~~5. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;~~

~~6. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;~~

~~7. All emission monitoring systems were kept in operation if at all possible;~~

~~8. The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and~~

~~9. The owner or operator properly and promptly notified the appropriate regulatory authority.]~~

9 VAC 5-60-30. Emission testing.

REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

A. Emission tests for hazardous air pollutant sources shall be conducted and reported and data shall be reduced as set forth in this chapter and in the appropriate reference methods; ~~if not appropriate, then equivalent or alternative methods shall be used: unless the board (i) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (ii) approves the use of an equivalent method, (iii) approves the use of an alternative method the results of which the board has determined to be adequate for indicating whether a specific source is in compliance, (iv) waives the requirement for emission tests because the owner of a source has demonstrated by other means to the board's satisfaction that the affected facility is in compliance with the standard, or (v) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.~~

B. Emission testing for hazardous air pollutant sources shall be subject to testing guidelines approved by the board. Procedures may be adjusted or changed by the board to suit specific sampling conditions or needs based upon good practice, judgement and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards. Tests shall be performed under the direction of persons whose qualifications are acceptable to the board.

C. Emission tests for hazardous air pollutant sources shall be conducted under conditions which the board shall specify to the owner based on representative performance of the source. The owner shall make available to the board such records as may be necessary to determine the conditions of the emission tests. Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions of emission tests for the purpose of an emission test; ~~nor shall~~ During the initial emission test] emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction [shall not] be considered a violation of the applicable emission limit

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unless otherwise specified in the applicable standard.

~~_____ D. Any owner may request that the board determine the visible emissions from a hazardous air pollutant source during the emission tests required by this section.~~

~~_____ E D. Each emission test for a hazardous air pollutant source shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or if conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of the sample train, extreme meteorological conditions or other circumstances beyond the owner's control, compliance may, upon the approval of the board, be determined using the arithmetic mean of the results of the two other runs.~~

~~_____ F E. The board may test emissions of air pollutants from any hazardous air pollutant source. Upon request of the board the owner shall provide, or cause to be provided, emission testing facilities as follows:~~

~~1. Sampling ports adequate for test methods applicable to such source;-. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct [free of cyclonic flow with acceptable flow characteristics] during [performance emission] tests, as demonstrated by applicable test methods and procedures.~~

~~2. Safe sampling platforms;-.~~

~~3. Safe access to sampling platforms; and-.~~

~~4. Utilities for sampling and testing equipment.~~

~~_____ G. Methods 101, 101A, 102 and 104 of Appendix B of 40 CFR 61 shall be used for all~~

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~~hazardous air pollutant source tests required under this chapter unless an equivalent method or an alternative method has been approved by the board:~~

~~——— H. —— Method 103 of Appendix B of 40 CFR 61 is hereby approved as an alternative method for sources subject to 40 CFR 61.32(a) and 40 CFR 61.42(b).~~

~~——— I. —— Method 105 of Appendix B of 40 CFR 61 is hereby approved as an alternative method for sources subject to 40 CFR 61.52(b).~~

~~——— J. —— The board may, after notice to the owner, withdraw approval of an alternative method granted under subsections H and I of this section. Where the test results using an alternative method do not adequately indicate whether a source is in compliance with a standard, the board may require the use of the reference method or its equivalent.~~

~~——— K E. —— Upon request of the board, the owner of any hazardous air pollutant source subject to the provisions of this chapter shall conduct emission tests in accordance with procedures approved by the board.~~

9 VAC 5-60-40. Monitoring.

A. Unless otherwise approved by the board or specified in applicable subparts listed in 9 VAC 5-60-70, the requirements of this section shall apply to all monitoring required in accordance with applicable subparts listed in 9 VAC 5-60-70. However, nothing in this chapter shall exempt any owner from complying with subsection C of this section.

B. Monitoring shall be conducted and reported and data shall be reduced as set forth in the methods and procedures contained in each applicable subpart listed in 9 VAC 5-60-70.

C. Upon request of the board, the owner of a hazardous air pollutant source subject to the provisions of this chapter shall install, calibrate, maintain and operate equipment for continuously monitoring and recording emissions, process parameters and air quality in accordance with methods and

REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION
procedures acceptable to the board.

9 VAC 5-60-50. Notification, records and reporting.

A. Any owner of a hazardous air pollutant source subject to the provisions of this chapter shall provide written notifications to the board of the following:

1. The date of commencement of construction, reconstruction or modification of a new or modified hazardous air pollutant source postmarked no later than 30 days after such date.
2. The anticipated date of initial startup of any new or modified hazardous air pollutant source not more than 60 days or less than 30 days prior to such date.
3. The actual date of initial startup of any new or modified hazardous air pollutant source within 15 days after such date.
4. The date of any emission test the owner wishes the board to consider in determining compliance with a standard. Notification shall be postmarked not less than 30 days prior to such date.

B. Any owner of a hazardous air pollutant source subject to the provisions of subparts listed in 9 VAC 5-60-70 shall maintain records of the occurrence and duration of any startup, shutdown or malfunction in the operation of a hazardous air pollutant source; any malfunction in the operation of a hazardous air pollutant source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

C. The owner of any existing hazardous air pollutant source or any new or modified hazardous air pollutant source to which an emission standard prescribed under the subparts listed in 9 VAC 5-60-70 is applicable which has an initial startup which preceded the effective date of an emission standard prescribed under this chapter shall, within 90 days after the effective date, provide the following information in writing to the board:

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1. Name and address of the owner;
 2. The location of the source;
 3. The type of hazardous air pollutants emitted by the source;
 4. A brief description of the nature, size, design and method of operation of the source including the operating design capacity of such source. Identify each point of emission for each hazardous air pollutant;
 5. The average weight per month of the hazardous materials being processed by the source, over the last 12 months preceding the date of the report;
 6. A description of the existing control equipment for each emission point;
 - a. Primary control devices for each hazardous air pollutant.
 - b. Secondary control devices for each hazardous air pollutant.
 - c. Estimated control efficiency (percent) for each control device.
 7. A statement by the owner of the source as to whether he can comply with the emission standards prescribed in this chapter within 90 days of the effective date.
- D. Changes in the information provided under subsection C of this section shall be provided to the board within 30 days after such change, except that, if the changes result from modification of the source, the provisions of 9 VAC 5 Chapter 80 (9 VAC 5-80-10 et seq.) are applicable.
- E. Reporting under this section shall be according to procedures acceptable to the board. Advice on reporting the status of compliance may be obtained from the board.
- F. Upon request of the board, the owner of a hazardous air pollutant source subject to the provisions of this chapter shall provide notifications and reports, revise reports, maintain records or report emission test or monitoring results in a manner and form and using procedures acceptable to the board.

REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

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REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION
CERTIFICATION

REGULATION 9 VAC 5 CHAPTERS 10, 20, 40, 50 and 60, REVISION D97

CONCERNING
SPECIAL PROVISIONS FOR EXISTING SOURCES,
NEW AND MODIFIED SOURCES, AND
HAZARDOUS AIR POLLUTANT SOURCES

I certify that this regulation is full, true, and correctly dated.

Signature: _____

Name of Certifying Official: Dennis H. Treacy

Title: Director

Agency: Department of Environmental Quality

Date: _____